



GRAIN TRANSPORTATION REPORT

Transportation & Marketing, Agricultural Marketing Service
United States Department of Agriculture

AUGUST 28, 2003

<u>TM GRAIN TRANSPORT COST</u> <u>INDICATORS</u>	<u>Ocean</u>				
	<u>Truck</u>	<u>Rail</u>	<u>Barge</u>	<u>Gulf</u>	<u>PNW</u>
Indicator Value* for 08/28	101	161	104	148	145
Compared to Last Week	Unchanged	↓	↑	↓	↓
*Indicator: Base Year 2000=100; Weekly Updates include Truck=Diesel; Rail=Nearby Secondary Rail Market; Barge=Spot Illinois River Basis; Ocean Vessel based on Routes to Japan					



Almost All of the Locks on the UMR-IW Are Half the Size of Today's Modern Tows. The typical lock on the UMR-IW is 600 feet long, whereas a tow of 15 grain barges is about 1,100 feet in length. For the tow to transit a 600-foot lock chamber, it must be separated into two 600-foot sections and pass through the lock in two shifts ([see photo](#)). This is a time-consuming process, which slows the passage of other tows waiting to use the lock. The cumulative effect of the passage and waiting processes adds considerable costs to barge operators due to increased fuel and labor. If passage and waiting times were reduced through navigation improvements, barge operators would incur reduced costs and could offer reduced freight rates to grain shippers.

Lower Cost of Shipping Grain by Water Keeps Nation Competitive. The lower inland transport costs of shipping grain on the UMR-IW provide a definite economic advantage for U.S. grain exporters. With improvements in the Brazilian infrastructure and continued production increases, Brazilian soybeans are likely to continue to cut into the U.S. share of the world soybean market. Many farm groups insist that the

United States maintain and enhance the distinct advantage it has over Brazil in internal transportation costs.

Since U.S. grain production exceeds domestic needs, a reliable and cost-efficient transportation system for exports is important. While exports may fluctuate from year to year, a successful export component of the grain market is critical to the economic viability of U.S. agriculture. Although increasing value-added exports is an important economic goal, raw bulk grain will still be a needed commodity throughout the world. If the United States does not extend and modernize locks on the UMR-IW, the costs of exporting grain will be higher, and the reliability of the system may dampen the demand for export grain. Under these conditions, exporters will need to reduce their costs in buying grain, and the lower grain prices will have a negative effect on farm income. Proponents of navigation improvement contend that if longer locks were built, barge traffic could move at a lower cost. Opponents of the lock expansion insist that the cost of the project will exceed the benefits provided by lower transportation costs.

Barge Freight Rates Lower Than Rail. Barge rates are quoted in terms of differentials from barge tariff benchmarks. Second quarter barge rates from Minneapolis-St. Paul, MN, were \$11.08 per ton. In comparison to rail, the tariff rate for a unit train shipment from Chicago, IL, to Baton Rouge, LA, was \$18-\$21 per ton, and the rail tariff rate from Minneapolis, MN, to Portland, OR, was \$27-\$31 per ton. Nick.Marathon@usda.gov

Please note: Car Unload Data (page 3) for class 1 railroads has been realigned one week forward to reflect the actual date of unload activities. The integrity and the accuracy of the data have not been compromised.

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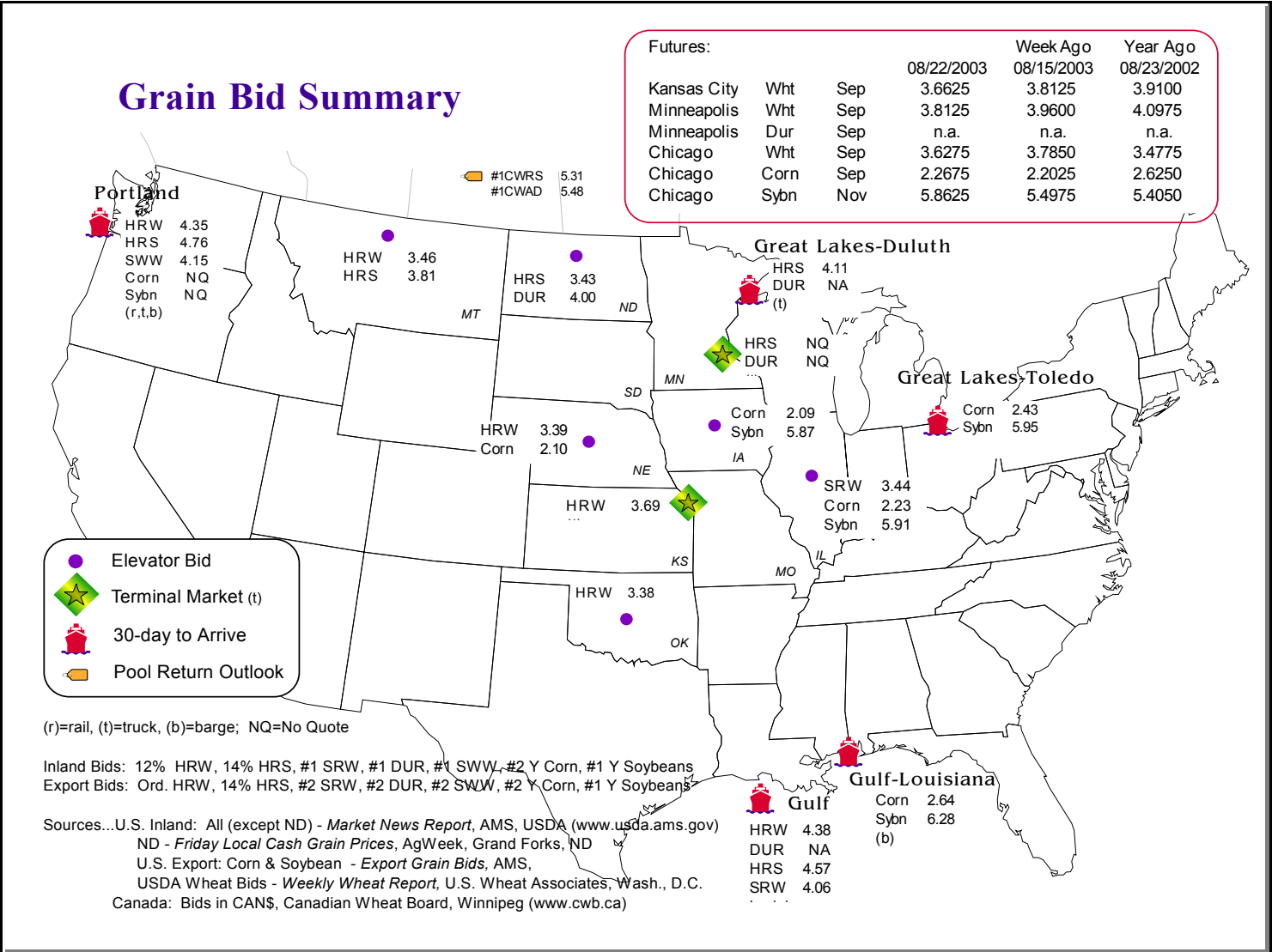
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The Grain Transportation Report is a weekly news source for grain logistics. Detailed data and trend information on five major modes: barge, truck, rail, container, and vessel, provide timely insight into grain transport. The report is offered to policymakers and industry as a tool in day-to-day decision making and longer-term strategic planning for an effective and efficient U.S. grain logistics system.

Market Update: U.S. Origins to Export Position Price Spreads (Per Bushel)

Commodity	Origin-- Destination	This week	Last week
Corn	IL -- Gulf	-0.41	-0.42
Corn	NE -- Gulf	-0.54	-0.52
Soybean	IA -- Gulf	-0.41	-0.55
HRW	KS -- Gulf	-0.69	-0.75
HRS	ND -- Portland	-1.33	-1.28

The **Grain Bid Summary** illustrates the market relationships for commodities. Positive and negative adjustments in differential between terminal and futures markets, and the relationship to inland market points, are indicators of changes in fundamental market supply and demand. The map may be used to monitor market and time differentials.

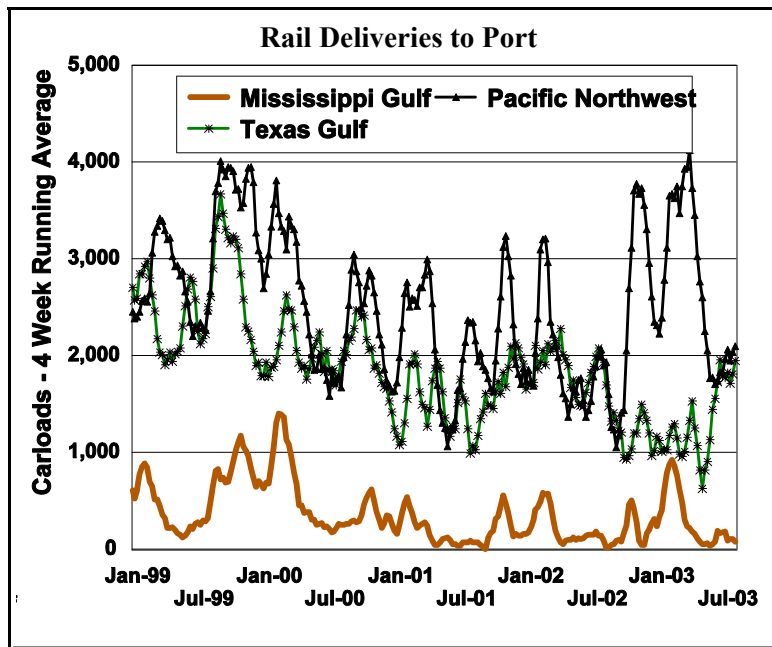
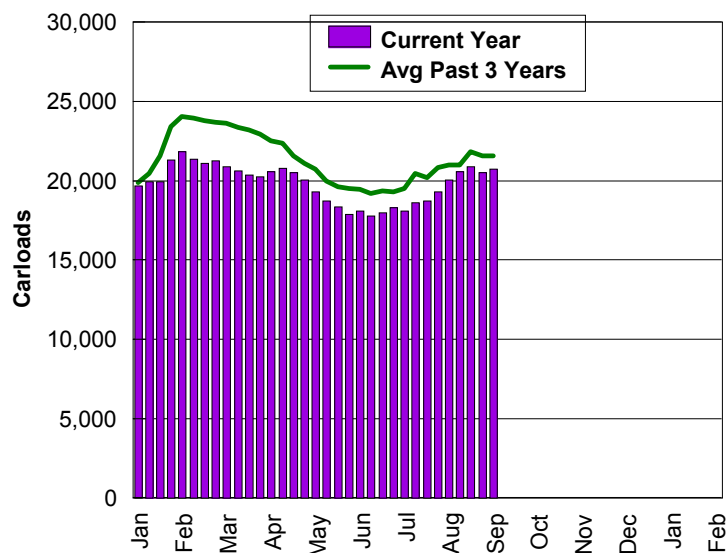


RAIL TRANSPORTATION

Rail Deliveries to Port (Carloads)

	Mississippi Gulf*	Texas Gulf	Pacific Northwest	Atlantic & East Gulf	Total
Week Ending:					
08/13/03	22	2,649	2,092	128	4,891
08/20/03	135	2,317	1,849	164	4,465
YTD 2003	9,636	46,121	89,198	11,091	156,046
YTD 2002	7,182	62,620	65,209	15,304	150,315
% YTD 2002	134%	74%	137%	72%	104%
Total 2002	11,112	83,799	111,719	21,551	228,181
Total 2001	10,022	81,804	111,376	26,604	229,806

Source: Transportation & Marketing/AMS/USDA; (*) Incomplete Data

**Grain Car Loadings for Class I Railroads**

Railroads originate approximately 40% of U.S. grain shipments. Trends in these loadings are indicative of market conditions and expectations.

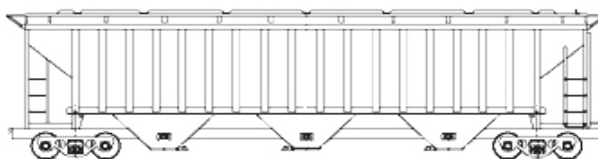
Class I Rail Carrier Grain Car Bulletin (Grain Carloads Originated and Grain Service Index)

	East		West			U.S. Total	Canada	
	CSXT	NS	BNSF	KCS	UP		CN	CP
08/16/03	2,376	3,449	7,946	539	6,920	21,230	3,387	4,083
This Week Last Year	2,405	2,898	7,754	454	6,360	19,871	3,065	4,042
2003 YTD	90,459	106,206	237,560	12,675	213,024	659,924	111,619	116,426
2002 YTD	91,402	102,930	243,365	18,097	219,214	675,008	131,876	119,905
% of Last Year	99%	103%	98%	70%	97%	98%	85%	97%
2002 Total	142,760	164,745	400,179	27,161	344,296	1,079,141	191,835	195,765

U.S. Rail Covered Hopper Cars Online Index*

July-03	93.5	96.5	92.9	88.5	92.9	93.4
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Source: Association of American Railroads; *Base Year =2001, Index based on Number of Covered Hopper Cars Online (available for Service).

**Tariff Rail Rates for Unit Train Shipments**

August 2003

Source: www.bnsf.com, approximate load per car = 100 tons: Corn 56 lbs/bu, Wheat & Soybeans 60 lbs/bu*

Date Effective	Tariff Item	Commodity	Origin	Destination	Rate Per Car	Rate Per MT	Rate/Per Bushel*
08/04/03	113710	Wheat	Kansas City, MO	Galveston, TX	\$1,720	\$18.96	\$0.52
08/04/03	43521	Wheat	Minneapolis, MN	Portland, OR	\$4,148	\$45.72	\$1.24
08/04/03	46540	Wheat	St. Louis, MO	Houston, TX	\$1,795	\$19.79	\$0.54
08/04/03	113710	Wheat	Kansas City, MO	Laredo, TX	\$2,180	\$24.03	\$0.65
08/04/03	15507	Wheat	Chicago, IL	Albany, NY	\$1,834	\$20.22	\$0.55
08/04/03	31005	Corn	Minneapolis, MN	Portland, OR	\$3,050	\$33.62	\$0.85
08/04/03	1132.002	Corn	Chicago, IL	Baton Rouge, LA	\$1,845	\$20.34	\$0.52
08/04/03	1132.03	Corn	Council Bluffs, IA	Baton Rouge, LA	\$1,970	\$21.72	\$0.55
08/04/03	113210	Corn	Evansville, IN	Raleigh, NC	\$1,686	\$18.58	\$0.47
08/04/03	1132	Corn	Des Moines, IA	Laredo, TX	\$2,595	\$28.60	\$0.73
08/04/03	61110	Soybean	Minneapolis, MN	Portland, OR	\$3,030	\$33.40	\$0.91
08/04/03	1144	Soybeans	Chicago, IL	Baton Rouge, LA	\$2,736	\$30.16	\$0.82
08/04/03	1144	Soybeans	Council Bluffs, IA	Baton Rouge, LA	\$2,799	\$30.85	\$0.84
08/04/03	1144	Soybeans	Des Moines, IA	Laredo, TX	\$2,864	\$31.57	\$0.86
08/04/03	11441	Soybeans	Evansville, IN	Raleigh, NC	\$1,686	\$18.58	\$0.51

Secondary Rail Car Market

Average Premium/Discount to Tariff, \$/Car - Last Week

	Delivery Period			
	Oct-03	Nov-03	Dec-03	Jan-04
BNSF-GF	\$101	\$26	\$16	\$6
UP-Pool	\$30	\$17	\$14	\$5

Rail service may be ordered directly from the railroad via **Auction** for guaranteed service or tariff for non-guaranteed service, or through the secondary market. The **Secondary Rail Market** information reflects trade values for service that was originally purchased from the railroad carrier as some form of guaranteed freight. The auction and secondary rail values are indicators of rail service quality and

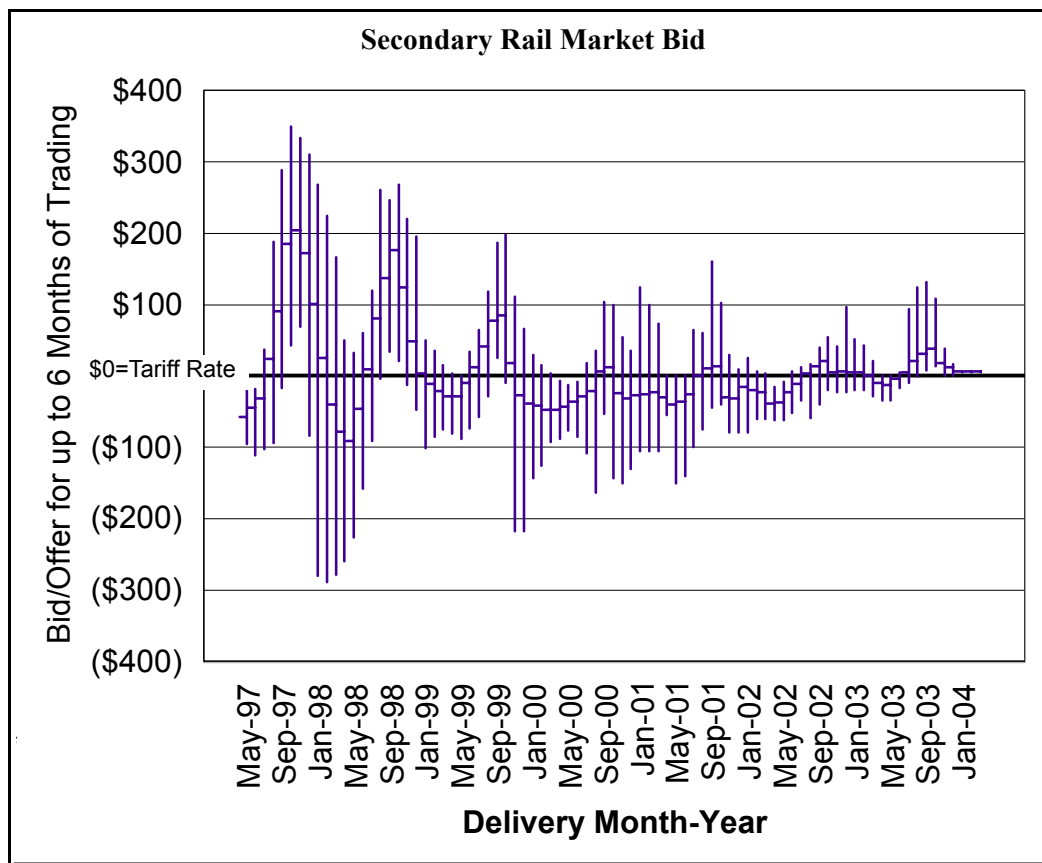
Railroad Car 'Auction' Results

Average Premium/Discount to Tariff, \$/Car - Last Auction

Delivery for:	Oct-03	Nov-03	Dec-03
COT/N. Grain	\$17	\$13	\$1
COT/S. Grain	no bid	no bid	\$4
GCAS/Region 1	no bid	no bid	no bid
GCAS/Region 2	\$6	\$3	\$1

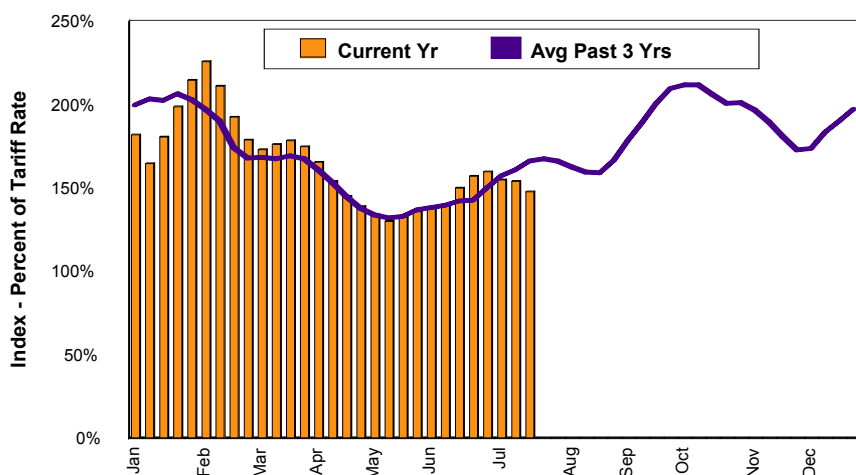
Source: Transportation & Marketing/AMS/USDA.

COT=Certificate of Transportation; GCAS=Grain Car Allocation System



BARGE TRANSPORTATION

Illinois River Barge Rate Index - Rate Quotes



The **Illinois River Barge Rate Index** averaged 183% of the Benchmark Tariff Rate between 1999 and 2001, based on weekly market quotes. The **Index**, along with **Rate Quotes** and **Futures Market** bids are indicators of grain transport supply and demand.

Calculating **Barge Rate** Per Ton:
 $\text{Index} \times \text{1976 Tariff Benchmark Rate per Ton}$

Select applicable index from market quotes included in tables on this page. The 1976 benchmark rates per ton are provided in map below.

BARGE RATE QUOTES: Southbound Barge Freight Index=Percent of Tariff, Based on 1976 Tariff Benchmark Rate

	8/20/03	8/13/03	Sept '03	Nov '03
Twin Cities	211	202	246	268
Mid-Mississippi	186	169	215	218
Illinois River	170	160	217	203
St. Louis	168	147	200	166
Lower Ohio	165	150	216	187
Cairo-Memphis	150	131	197	157

Source: Transportation & Marketing /AMS/USDA

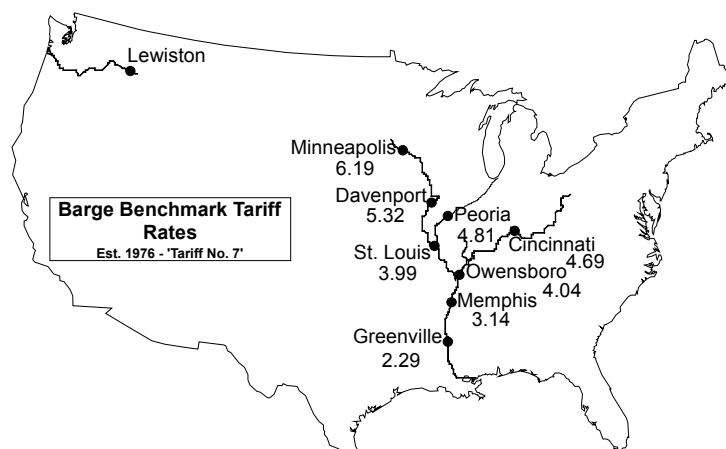
BARGE FUTURES MARKET

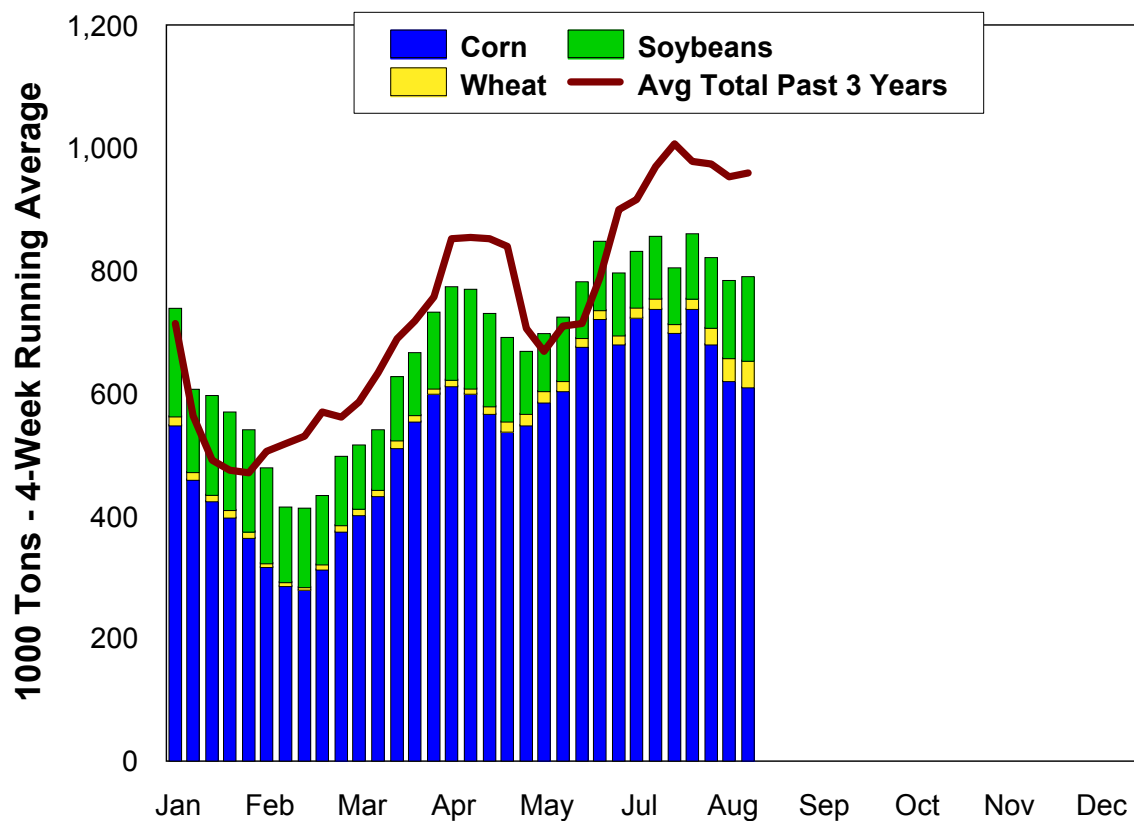
Southbound Barge Freight Nominal/Cash Basis Values

Index=Percent of Tariff, Based on 1976 Tariff Benchmark Rate

Week ended	River/Region	Contract Period	Rate	
			Futures	Cash
8/26/03	St. Louis	Sep.	n/a	215
		Nov.	n/a	170
		Dec.	n/a	143
		Jan.	n/a	143
	Illinois River	Feb.	n/a	143
		Sep.	n/a	215
		Nov.	n/a	205
		Dec.	n/a	180
		Jan.	n/a	205
		Feb.	n/a	185

Source: St. Louis Merchants Exchange



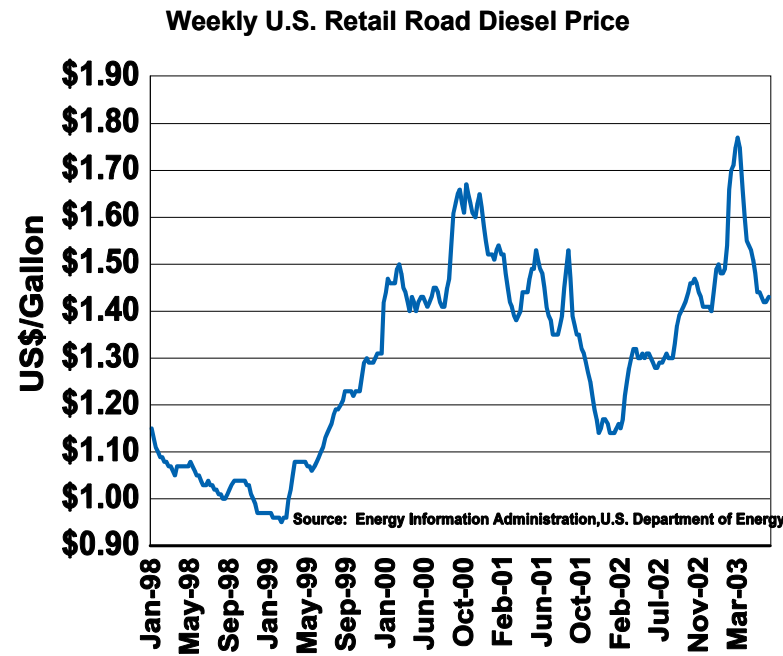
Barge Movements on the Mississippi River (Lock 27)**Barge Grain Movements (1,000 Tons)**

for week ending 8/16/03

	<u>Corn</u>	<u>Wht</u>	<u>Sybn</u>	<u>Total</u>
Mississippi River				
Rock Island, IL (L15)	207	11	30	253
Winfield, MO (L25)	425	29	50	510
Alton, IL (L26)	574	37	77	694
Granite City, IL (L27)	565	37	77	715
Illinois River (L8)	128	6	11	147
Ohio River (L52)	17	19	14	54
Arkansas River (L1)	0	42	0	42
2003 YTD	18,918	1,571	5,322	26,345
2002 YTD	23,226	1,585	6,698	32,592
% of 2002 YTD	82%	99%	80%	81%
Total 2001	31,878	2,679	10,616	47,091

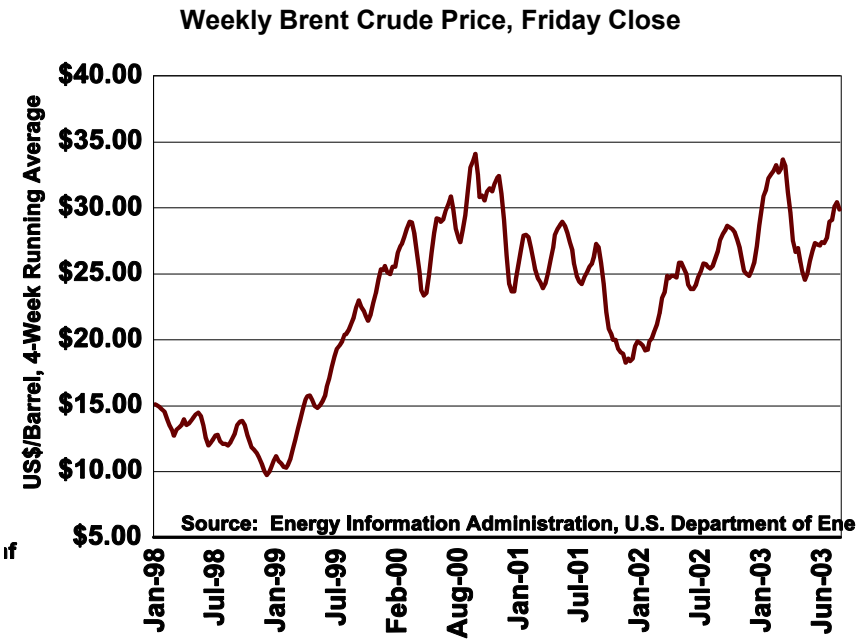
Source: U.S. Army Corp of Engineers,
YTD and Calendar year total includes Miss/27, Ohio/52 and Ark/1.

TRUCK TRANSPORTATION



The weekly **Diesel Price** provides a proxy for trends in U.S truck rates. Diesel fuel is a significant expense for truck grain movements, accounting for 37% of the estimated variable cost. **Crude Oil Price** is an indicator in future diesel price trends.

Light Sweet Crude is exchanged on the New York Mercantile Exchange. North Sea oil has a "benchmark" role in crude oil pricing. Brent crude, a blend of North Sea oils, is traded on the International Petroleum Exchange in London.



Crude Oil Prices (08/26/03)			
US\$ per Barrel	This Week	Last Week	
Light Sweet Crude (NYMEX)	31.25	30.43	↑
Brent Crude	30.06	28.91	↑

Source: www.eia.doe.gov; *U.S. Refiner Crude Acquisition Cost, Composite Domestic & Import

GRAIN EXPORTS

U.S. Export Balances (1,000 Metric Tons)									
				W heat			C orn *	Soybean *	Total
	HRW	SRW	HRS	SW W	DUR	All			
08/14/2003	2,046	529	1,242	557	172	4,546	7,108	1,088	12,742
This Week Year Ago	1,033	358	1,168	629	111	3,298	3,592	7,740	14,630
Commulative Exports-Crop Year									
03/04 YTD	2,234	764	1,124	703	193	5,019	38,006	28,479	71,504
02/03 YTD	1,937	682	1,126	692	200	4,637	45,706	29,231	79,574
01/02 Total	8,761	5,485	5,582	3,175	1,133	24,135	48,003	29,926	102,064
00/01 Total	9,314	4,445	5,775	5,156	1,130	25,819	47,734	27,567	101,120
99/00 Total	10,629	4,195	5,590	4,055	984	25,453	48,760	26,972	101,185
Source: Foreign Agricultural Service YTD-Year-to-Date (www.fas.usda.gov)									

U.S. Grain Inspected for Export



Select

U.S. Port Regions - Grain Inspections for Export (1,000 Metric Tons)

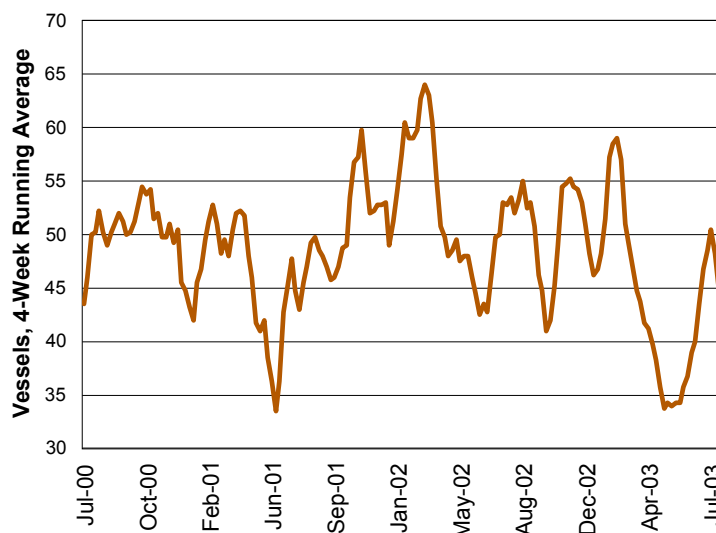
	<u>Pacific Region</u>			<u>Mississippi Gulf</u>			<u>Texas Gulf</u>			<u>Port Region Total</u>		
	<i>Wheat</i>	<i>Corn</i>	<i>Soybn</i>	<i>Wheat</i>	<i>Corn</i>	<i>Soybn</i>	<i>Wheat</i>	<i>Corn</i>	<i>Soybn</i>	<i>Pacific</i>	<i>Mississippi</i>	<i>Texas</i>
08/21/03	227	117	0	116	464	196	312	0	0	343	776	312
2003 YTD	5,281	3,311	2,720	3,284	18,209	10,589	3,736	529	56	11,312	32,082	4,322
2002 YTD	5,569	2,870	1,451	3,818	25,028	10,988	4,093	214	360	9,890	39,834	4,668
% of 2002 YTD	95%	115%	187%	86%	73%	96%	91%	247%	16%	114%	81%	93%
2002 Total	10,007	5,877	1,639	6,829	34,991	17,996	6,971	468	468	17,523	59,816	7,906

Source: Federal Grain Inspection Service YTD-Year-to-Date

Gulf Port Region Grain Vessel Loading Past 7 Days

The U.S. Exports Approximately One-Quarter of the Grain it Produces. On average, it includes nearly 45% of U.S. grown wheat, 35% of U.S. grown soybeans, and 20% of the U.S. grown corn.

Over 60% of these U.S. export grain shipments departed through Louisiana Gulf region in 2002.



Port Region Ocean Grain Vessels

	Gulf			Pacific Northwest	Vancouver B.C.
	<u>In Port</u>	<u>Loaded 7-Days</u>	<u>Due Next 10-Days</u>	<u>In Port</u>	<u>In Port</u>
08/14/03	35	36	69	9	12
08/21/03	41	57	72	9	8
2002 Range	(15..55)	(33..66)	(44..82)	(3..15)	(0..12)
2002 Avg	35	51	65	8	5

Source: Transportation & Marketing /AMS/ USDA

Quarterly Ocean Freight Rates

Average Rates & Percentage Changes, U.S. Dollars/Metric Ton

	2003 2 nd Qtr	2002 2 nd Qtr	% Change		2003 2 nd Qtr	2002 2 nd Qtr	% Change
Gulf to				Pacific NW to			
Japan	\$31.53	\$19.43	62%	Japan	\$19.33	\$11.03	75%
Mexico	-	\$46.92	-				
N. Europe	\$18.98	\$13.58	40%	Argentina/Brazil to			
N. Africa	\$21.75	\$15.84	37%	Med. Sea	\$24.50	\$16.98	44%
Med. Sea	\$21.88	\$12.62	73%	N. Europe	-	\$17.16	-
				China	\$32.50	-	-

Source: Transportation & Marketing/AMS/USDA

Ocean Freight Rates for Selected Shipments - week ending 8/23/03

Export Region	Import Region	Grain	Month	Volume Loaded (Tons)	Freight Rate (\$Ton)
U.S. Gulf	Taiwan	Hvy Grain	Oct 1/15	56,000	\$33.00
U.S. Gulf	Eritrea	Sorghum	Oct 10/20	14,000	\$57.15*
U.S. gulf	Eritrea	Sorghum	Dec 20/30	10,220	\$60.95*
River Plate	Jordan	Meals	Aug 21/25	19,000	\$44.00
River Plate	Egypt Med	Grains	Sep 5/15	44,000	\$32.50
So Brazil	France	Pellets	Sep 10/20	25,000	\$22.50

Source: Maritime Research Inc.

Rates shown are for metric ton (2,204.62 lbs.=one metric ton), F.O.B., except where otherwise indicated; op=option

*Most food aid from the United States is required to be shipped on U.S. flag vessels. The vessels are of limited availability resulting in higher rates. In addition, destinations receiving food aid generally lack adequate port unloading facilities, requiring the vessel to remain in port for a longer duration than normal.

CANADIAN PORTS ACTIVITY
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Select Canadian Port Export Inspections 1,000 Metric Tons, Week End Summary

	<u>Wheat</u>	<u>Durum</u>	<u>Barley</u>
06/19/2003			
Vancouver	105	5	
Prince Rupert			
Prairie Direct	5		
Thunder Bay	18		
St. Lawrence	4,492	2,329	290
2001/02 YTD	10,666	2,963	961
2002/03 YTD	4,620	2,334	290
% of Last Year	43%	79%	30%

Source: Canadian Grains Commission, Crop Year 8/1-7/31

CONTAINER

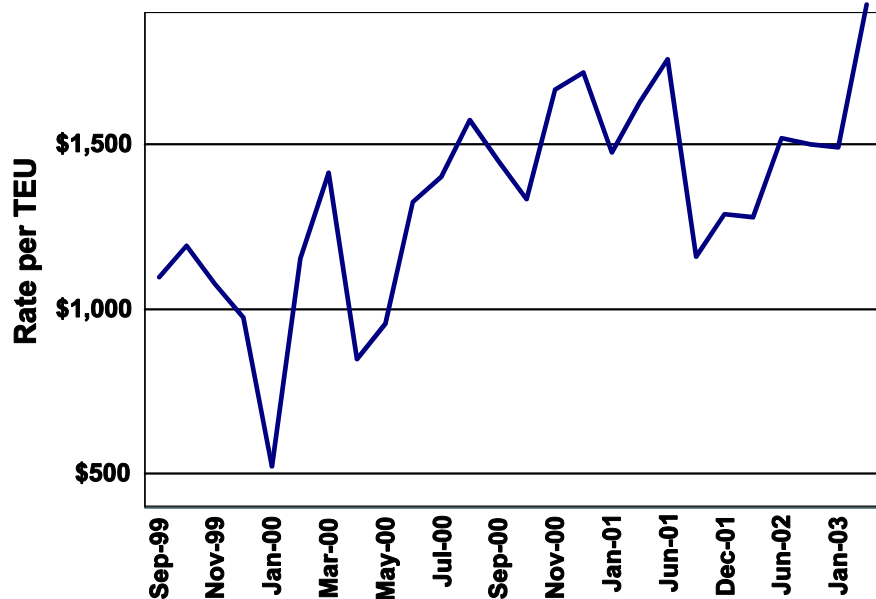
Container Ocean Freight Rates

Average Rate per TEU, Weighed by Shipping Line Market Share

Source: Transportation & Marketing/AMS/USDA, Quarterly Updates

Container Rates - Soybeans

Seattle, WA Origin to Tokyo, Japan



Approximately 420,000 MT of grain and oilseed exports were marketed via container in 2001. This volume increased 26% compared to 1997.

Container Rates - Feed Grain

Seattle, WA Origin to Selected Destinations

